



VITRONIC
machine vision people

VICAM^{snap!}

Multipurpose Camera-based Auto-ID System for the Capturing and Processing of 1-D and 2-D Codes

The camera-based Auto-ID system VICAM^{snap!}

- Decodes all industry standard 1-D and 2-D barcode symbologies
- Is independent of speed: Objects can be passed through the reading field at high speeds
- Allows completely Hands-Free operation to maximize throughput
- Uses integrated loudspeaker for user instructions and audible signals
- Provides the largest depth of field and width of field in the market in this product category: It provides a 12" x 10" capture window and a minimum depth of field of 12"
- Provides images for OCR

The camera-based Auto-ID system

VICAM^{snap!} consists of:

- High-performance matrix camera
- Long-life white LED illumination
- Aiming device: shows the center of the reading field, selectable design (option)
- Visual feedback (green and red) on the object, configurable
- Powerful barcode / 2-D code decoder unit
- Loudspeaker for configurable spoken instructions and audible signal feedback
- Status-LEDs
- Gigabit Ethernet interface for image and result data

Advantages over laser scanners

- Camera technology provides much higher read rates than conventional laser scanning solutions
- Reads 2-D symbologies including high density modulated codes
- Reads red barcode labels and other barcode colors that conflict with laser diode wavelength limitations
- Reads poorly printed and partly damaged codes
- Archives images automatically or on demand (OCR applications, proof of scanning, etc.) on an external system (FTP)
- Helps to improve read rates by optimizing label quality and your internal and external processes
- Increases throughput in manual applications without looking for a „sweet spot“.
- Provides real-time or offline image processing routines
- Less susceptible to outside ambient light interferences
- Longer life cycle and virtually maintenance free

Applications

The VICAM^{snap!} is a standalone stationary Auto-ID system for:

- Letters, packages, parcels, post
- Picking at mail order companies
- Warehousing
- Inbound and outbound processing
- Distribution channels
- Order fulfillment
- Air freight / Customs clearance
- Sort to voice
- Baggage handling
- Compliance / validation
- Error proofing routines
- Tire scanning
- etc.



VICAM^{snap!} Sensor Unit



VICAM^{snap!} Decode Unit

VICAM ^{snap!} Sensor Unit	
High-performance matrix camera	5MPixel Standard: 10Fps higher data on request
White LED illumination	long-life durability homogeneous illumination LED class 1 (eye-safe) no flashing
Standard lens	C-Mount individually adaptable for the application (optional) Working distance 1300mm +- 150mm 51inch +- 6inch
Audio feedback	90dB, configurable spoken instructions, multilingual
Status LED	6 LEDs, different colors
Case	Robust leightweight fiberglass case Safety eyelet Plug & Play
IO	Trigger (optional), Speed sensor (optional), Other 24V IOs (optional)

VICAM ^{snap!} Performance Data	
Performance Data	
Read area (B x T x H)	310mm x 260mm x 300mm 12.2inch x 10.2inch x 12inch at 200dpi, with standard lens Higher dpi possible by adjustment of read area
Object speed	up to 2,5m/s / 490fpm
MTBF	80.000h
MTTR	< 2min.
Function	
GUI / Graphical user interface	Configuration Statistics Status Display screen (last read) No calibration necessary
Decode Unit	
Interface	Gigabit Ethernet RS232 (optional) VGA USB Power

VICAM ^{snap!} Mechanical data, Environmental conditions		
	Sensor unit	Decode unit
Dimensions (B x T x H)	315mm x 250mm x 137mm 12.4inch x 9.9inch x 5.4inch	305mm x 288mm x 131mm 12inch x 11.3inch x 5.2inch
Weight	< 4kg / 9lbs	7kg / 15.4lbs
Mount	tool-free, plug & play	can be mounted with screws
Power supply	115VAC to 230VAC (50Hz to 60Hz)	115VAC to 230VAC (50Hz to 60Hz)
Operating temperatures	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
Storage temperatures	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)
Humidity	10% to 90%, non-condensing	10% to 90%, non-condensing
Protection class	IP54	IP50, industrial case
Compliance	RoHS, CE, FCC	RoHS, CE, FCC

Advantages of VICAM^{snap!}

- Compact and lightweight solution for ease of installation
- White LED illumination provides consistent lighting and the ability to read red and colored barcodes
- Continuous reading mode with automatic trigger
- High resolution camera with excellent image quality
- Fast image processing for redundancy and precision accuracy
- Fast decoder allows for more complex application expansion
- Universally designed for manual and automated systems integration
- Built-in diagnostics and external status indicator LEDs
- Flexible interface options
- Virtually no maintenance: operates 24h per day, 365 days per year
- Designed for industrial environment
- OCR ready images, grayscale or binarized
- Command codes for configuration
- Region of interest can be adapted